

a silicon oxide film for sealing an etchant filling hole of a sacrificial layer on said diaphragm;

said semiconductor pressure sensor characterized in that a polysilicon film is provided to cover part or all of said silicon oxide film.

2. (Amended) A semiconductor pressure sensor according to Claim 1, characterized in that a distance of said covered part is at least 10 microns or less from said etchant filling hole.

3. (Amended) A semiconductor pressure sensor according to Claim 1, characterized in that a thickness of said polysilicon film is 0.1 microns or more.

4. (Amended) A semiconductor pressure sensor according to Claim 1, characterized in that a thickness of said polysilicon film is 0.1 microns or more up to and including 0.4 microns.

5. (Amended) A pressure detector, comprising:

(a) a detector providing an output, the detector including as an integral unit;

a substrate,

a diaphragm formed on said substrate by a sacrificial layer etching method,

a silicon oxide film for sealing an etchant filling hole of a sacrificial layer on said diaphragm, and

a polysilicon film covering part or all of said silicon oxide film;

(b) a correction circuit for correction of the output of said detector;

(c) a package enclosing said correction circuit and said detector; and

(d) an intake tube provided in said package, the intake tube being used for introducing external pressure to said detector.

6. (Amended) A pressure detector according to Claim 5, characterized in that a distance (h) of said covering part is at least 10 microns or less from said etchant filling hole.

7. (Amended) A pressure detector according to Claim 5, characterized in that a thickness (i) of said polysilicon film is 0.1 microns or more.

8. (Amended) A pressure detector according to Claim 5, characterized in that a thickness (j) of said polysilicon film is 0.1 microns or more up to and including 0.4 microns.

9. (Amended) A pressure detector according to Claim 5 comprising:

(e) a sub-package further comprising said correction circuit and said detector as an integral unit, and having on a surface a pad connected to said correction circuit, and

(f) an output terminal removably connected to an external signal line and being used to send a signal from said correction circuit to the external signal line;

said pressure detector further characterized in that

(g) said correction circuit and said detector are enclosed by said package after said pad and said output terminal are connected by a metal wire.

Please add new claim 10 as follows:

10. (new) A semiconductor pressure sensor, comprising:

a substrate;

a diaphragm arranged on the substrate, a gap between the diaphragm and the substrate being formed by sacrificial layer etching using etch channels arranged about a periphery of the diaphragm;

a silicon oxide film arranged over the diaphragm in order to seal the etching channels; and

a polysilicon film covering at least a substantial portion of the silicon oxide film.

(Applicants' remarks are set forth herein below starting on the following page).